

## Claims

- [c1] An air conditioning system using enthalpy of the outside air, said air conditioning system comprising:
- a sensing section including an interior temperature sensing part detecting temperature of the inside of a building by an interior temperature sensor, the outside air temperature sensing part detecting temperature of an air which flows from an outside of the building to the inside by the outside air temperature sensor, an exhaust air temperature-sensing part detecting temperature of an air which discharges from the inside of the building to outside by an exhaust air temperature sensor, a humidity sensing part detecting a humidity of the inside and outside of the building by a humidity sensor and an outside temperature humidity sensor, a fan RPM sensing part detecting RPM of an interior ventilation fan, and a CO<sub>2</sub> sensing part detecting a concentration of CO<sub>2</sub> of the inside of the building using CO<sub>2</sub> sensor;
  - a control section receiving an input sense signal from said sensor section, computing enthalpy of the air which flows from the outside of the building to the inside, and detecting the air which discharges from the inside of the building to the outside, thereby, when the difference between the enthalpies is large, decreasing largely an opening rate of the outside air inflow damper or a discharge damper so that a little amount of an air flows into the inside of the building, or a little amount of an air discharges to the outside of the building;
  - a setting section including temperature setting part setting the interior temperature of the building and a humidity setting part setting the exterior temperature of the building, the setting section inputting the set key value to the control section;
  - an interior ventilation fan driving section operating the interior ventilation fan according to the control of the control section;
  - an outside air inflow damper driving section operating the outside air inflow damper according to the control of the control section;
  - a discharge damper driving section operating the inside air discharge damper according to the control of the control section;
  - a heater driving section operating a heater;
  - a cooler driving section operating a cooler; and

a humidifier driving section operating a humidifier.

- [c2] The air conditioning system according to Claim 1, wherein said setting section further comprises an heart driving choice key for preventing the pipe from being froze to burst.
- [c3] The air conditioning system according to Claim 1, wherein said setting section further comprises an odor emitting device driving choice key for generating the odor in the inside of the building.
- [c4] The air conditioning system according to Claim 1, wherein said air conditioning system further comprises a heater driving section operating an heater for preventing the pipe from being frozen to burst.
- [c5] The air conditioning system according to Claim 1, wherein said air conditioning system further comprises an odor emitting driving section operating the odor emitting device for generating the odor in the inside of the building.
- [c6] The air conditioning system according to Claim 1, wherein all of the sensors and driving devices are connected to the main control system so that said air conditioning system is controlled and managed in the central.
- [c7] The air conditioning system according to Claim 1, wherein said control section detects an amount of CO<sub>2</sub> of the inside of the building, and adjusts automatically an amount of the air which flows to the inside and an amount of the air which discharges to the outside according to the detected amount.